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LETTER TO THE EDITOR

Comments on: "Recession wedge trochleoplasty as an additional procedure in the surgical treatment of patellar instability with major trochlear dysplasia: early results" by M. Thauinat, C. Bessiere, N. Pujol, P. Boisrenoult, P. Beaufils, published in Orthop Traumatol Surg Res 2011;97(8):833–45

We read the article by Thauinat et al. using the recession wedge trochleoplasty (RT) technique which was developed by our team, with interest. However, the indications for RT are different in the two articles. In our paper [1], RT is used in patellofemoral (PF) instability that has been stabilized, but is still painful. In the article by Thauinat et al. RT is one of several procedures used to correct patellofemoral instability with patellar dislocation or subluxation, procedures which include 10 mm of frontal translation of the anterior tibial tuberosity (ATT) which is nearly always medial. Because different procedures were associated, it was impossible for the authors to determine the exact role of RT in PF stabilization.

We believe that the role of RT can be evaluated using a diagram which allowed us to study the effect of the postoperative ATT.TG (anterior tibial tubercle trochlear groove distance) – trochlear angle (measured at 30° of flexion) on stabilization and postoperative pain after a mean follow-up of 8 years (5–14 years) in 63 cases of PF instability with at least one episode of patellar dislocation. Medial transfer of the ATT was only performed in one case (associated with resection of the lateral retinaculum) [2]. Values for each knee were positioned on the diagram in relation to the postoperative ATT.TG value – which is 6 mm less than that measured in extension [2] – and the trochlear angle (the trochlear prominence was not taken into account). Three areas were identified: one area of PF instability, one area of PF stability, pain free or nearly pain free, and one area of stabilized but clearly painful PF. For each trochlear angle, PF stability and lack of pain (or nearly) was obtained with the ATT.TG value in a range of 9 mm; the wider the trochlear angle, the lower the ATT.TG values. An ATT.TG value that was above this limit resulted in PF instability and a lower value

resulted in PF stability with pain. However, whatever the trochlear angle, a ATT.TG below 3 mm resulted in a clearly painful patella.

In the series by Thauinat et al., 14/16 knees treated for patellar dislocations could be analyzed. In eleven, transfer of the ATT resulted in a postoperative ATT.TG (calculated at 30° of flexion) – trochlear angle within the area of patellar stability on our diagram. But patellar dislocation recurred in two of these knees (cases – 14R, 15) and the patients were still apprehensive in three (cases 1, 10, 14L). The ATT.TG values of these knees were nearly in the area of instability. Did RT favor persistent patellar instability by reducing the lateral trochlear prominence? On the other hand, the ATT.TG – trochlear angle in three of these knees (cases 8, 9, 17) was still in the area of instability. Two knees were stable (medial patellofemoral ligamentoplasty was performed in one – case 9) and one patient remained apprehensive about one knee, even though this ligamentoplasty had been performed (case 17). Seven of the 14 knees had a postoperative ATT.TG below 3 mm (cases 1, 3L, 3R, 6, 12, 13, 15). These knees should have become clearly painful, but they did not, probably thanks to RT, which reduces sagittal patellofemoral forces.

Thus RT seems to prevent pain caused by significant medial transposition that is not modulated in relation to the preoperative ATT.TG-trochlear angle. However, this technique has not been clearly shown to be beneficial in stabilizing patellar dislocations.

Disclosure of interest

The author declare that he has no conflicts of interest concerning this article.

References

- [1] Goutallier D, Raou D, Van Driessche S. Retro-trochlear wedge reduction trochleoplasty for the treatment of painful patella syndrome with protruding trochleae. Technical note and early results. *Revue de Chirurgie Orthopedique et Reparatrice de l'Appareil Moteur* 2002;88(7):678–85.
- [2] Goutallier D, Bernageau J. Le point sur la TA-GT. In: Goutallier D, editor. *Pathologie fémoro patellaire. Les Cahiers d'enseignement de la SOFCOT*; 71. Paris: Expansion Scientifique Publications; 1999. p. 179–82.

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